Goal of Approach:

Project "Reduce vulnerability to extreme floods and climate change in the Dniester river basin" aims to reduce risks from climate change (and specifically flooding) for security by improving the adaptive capacity of Ukraine and the Republic of Moldova. More specifically, the project aims to expand and further strengthen cooperative management in the Dniester River basin to address cross-border management of floods, taking into account both current climate variability and long-term impacts of climate change on flood risks.

Input provided by: Lesya Nikoalyeva, ZOI Environment Network

Main elements of the implementation strategy

Subsequently, the collected data and information will be processed and used as a basis for developing an agreed upon assessment of climate change impacts, with a special focus on flood problems. Modelling and scenario building will help to assess climate change impacts, in particular on the occurrence, frequency and magnitude of extreme floods. Based on the results as well as further information, a vulnerability assessment will be carried out with a special focus on floods in order to identify the most vulnerable areas, economic activities, ecosystems and population groups. Different types of flood risk maps will be produced depending on the needs of the users and the data available i.e. flood hazard maps and vulnerability or risk maps which will help in the prioritization of measures and areas for further action. Based on the results of the vulnerability assessment, further adaptation and especially flood risk reduction measures will be identified, prioritized and planned jointly by the riparian States, including financing aspects.

Moreover the project will support ongoing efforts in the Republic of Moldova and Ukraine to improve monitoring and forecasts of transboundary floods through the strengthening of the joint system for automated flow monitoring and data exchange (4- 6 new automated flow monitoring stations and data exchange infrastructure). Furthermore, capacity-building on flood alerts and flood communication will be provided through a workshop for national and local experts, the production of local early warning plans, and information material for the general population.

Targeted beneficiaries

The project beneficiaries are:

- Countries: Ukraine and Republic of Moldova,
- Plenipotentiaries,
- Dniester III project stakeholders,
- Ministries of Environment in both countries,
- State Water Committees in Ukraine and Moldova

Any significant lessons learned

The main lessons learned:

1. Often, many more activities and data regarding climate change exist upon which the project should build, they need to be identified at the beginning and throughout the project, establishing partnerships with other organizations working on this area is very useful.

2. Baseline studies are very important, they should be discussed at stakeholder meetings.

3. It is crucial to establish a working group with representatives of the government, the water authorities, academia, NGOs and other experts to oversee the project and promote its results at the national and transboundary level.

4. Like in many other river basins, it has been difficult to conclusively single out the impacts of the changing climate upon water resources. Whereas such impacts upon average river flow are relatively clear, the impacts upon extreme

UNFCCC expert meeting on a range of approaches to address loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events, 27–29 August, 2012, Bangkok, Thailand

(high) flow are much more uncertain.

5. Flood risk / hazard assessments for specific areas in the basins are extremely informative tools for preparing the authorities and the population to possible impacts of climate change, but such assessments require elaborated hydrodynamic and cartographic modelling that is time-, data- and resoruce-consuming

6. it is difficult to promote basin-scale adaptation to climate change where basin management institutions are weak or absent (as is often the case throughout Eastern Europe)

Resource requirements

The project implementation is funding by ENVSEC Initiative that consist of such institutions as UNECE, UNEP, UNDP, REC, NATO as an associated partner. Some tasks of the project require countries' budgetary support for its further implementation.

Potential for replication or scaling-up

The project "Reduce vulnerability to extreme floods and climate change in the Dniester river basin" is implementing in the framework of Transboundary pilot projects on climate change adaptation; among other river basins that are studied there are such basins as Chu Talas, Danube, Dauria, Meuse, Neman, Rhine, Sava. During pilot projects implementation the project partners have possibility for experience exchange on specific approaches.

The project could be applicable for other mountain areas.

Any additional information

http://www1.unece.org/ehlm/platform/display/ClimateChange/Dniester http://dniester.org